

WHAT IS CLAIMED IS:

1. An adaptive array radio communication apparatus having a plurality of antennas, comprising:

estimation means for estimating a correlation value between signals of a plurality of streams received at respective said plurality of antennas,

5 display means for displaying said estimated correlation value between said signals of said plurality of streams, and

antenna correlation adjustment means for causing the correlation value between said signals of said plurality of streams to be altered manually by a user.

10

2. The adaptive array radio communication apparatus according to claim 1, wherein said display means displays the correlation value between said signals of said plurality of streams.

3. The adaptive array radio communication apparatus according to claim 1, wherein said display means displays a magnitude level of the correlation value between said signals of said plurality of streams.

4. The adaptive array radio communication apparatus according to claim 1, wherein said display means can selectively display the correlation value between said signals of said plurality of streams and a magnitude level of said correlation value as a display content,

5 said adaptive array radio communication apparatus further comprising display content designation means for determining the display content by said display means in accordance with designation by a user in advance.

5. The adaptive array radio communication apparatus according to claim 1, wherein said display means can selectively display the correlation value between said signals of said plurality of streams and a magnitude level of said correlation value as a display content,

5           said adaptive array radio communication apparatus further comprising display content switch means for sequentially switching the display content by said display means periodically.

6.   The adaptive array radio communication apparatus according to claim 1, further comprising actuation means for actuating automatically said estimation means and said display means.

7.   The adaptive array radio communication apparatus according to claim 1, further comprising actuation means for actuating said estimation means and said display means in accordance with designation by a user.

8.   An adaptive array radio communication apparatus having a plurality of antennas, comprising:

5           estimation means for estimating a correlation value between signals of a plurality of streams received at respective said plurality of antennas, and

          antenna correlation adjustment means for altering the correlation value between said signals of said plurality of streams such that said estimated correlation value becomes smaller.

9.   The adaptive array radio communication apparatus according to claim 8, wherein said antenna correlation adjustment means comprises

          antenna driving means for modifying an angle between a plurality of antennas, and

5           control means for controlling said antenna driving means such that an angle between said plurality of antennas is modified to cause said correlation value to become lower than a predetermined threshold value.

10.   The adaptive array radio communication apparatus according to claim 8, further comprising actuation means for actuating automatically said estimation means and said antenna correlation adjustment means.

11. The adaptive array radio communication apparatus according to claim 8, further comprising actuation means for actuating said estimation means and said antenna correlation adjustment means in accordance with designation by a user.

12. An antenna correlation display method of an adaptive array radio communication apparatus having a plurality of antennas, said method comprising the steps of:

5       estimating a correlation value between signals of a plurality of streams received at respective said plurality of antennas, and  
      displaying said estimated correlation value between said signals of said plurality of streams.

13. The antenna correlation display method according to claim 12, wherein said display step displays the correlation value between said signals of said plurality of streams.

14. The antenna correlation display method according to claim 12, wherein said display step displays a magnitude level of the correlation value between said signals of said plurality of streams.

15. An antenna correlation adjustment method of an adaptive array radio communication apparatus having a plurality of antennas, said method comprising the steps of:

5       estimating a correlation value between signals of a plurality of streams received at respective said plurality of antennas, and  
      altering the correlation value between said signals of said plurality of streams such that said estimated correlation value becomes smaller.

16. The antenna correlation adjustment method according to claim 15, wherein said correlation value altering step further includes the step of modifying an angle between said plurality of antennas such that said correlation value becomes lower than a predetermined value.

17. An antenna correlation display program of an adaptive array radio communication apparatus having a plurality of antennas, causing a computer to execute the steps of:

- 5       estimating a correlation value between signals of a plurality of streams received at respective said plurality of antennas, and  
      displaying said estimated correlation value between said signals of said plurality of streams.

18. The antenna correlation display program according to claim 17, wherein said display step displays the correlation value between said signals of said plurality of streams.

19. The antenna correlation display program according to claim 17, wherein said display step displays a magnitude level of the correlation value between said signals of said plurality of streams.

20. An antenna correlation adjustment program of an adaptive array radio communication apparatus having a plurality of antennas, said program causing a computer to execute the steps of:

- 5       estimating a correlation value between signals of a plurality of streams received at respective said plurality of antennas, and  
      altering the correlation value between said signals of said plurality of streams such that said estimated correlation value becomes smaller.